

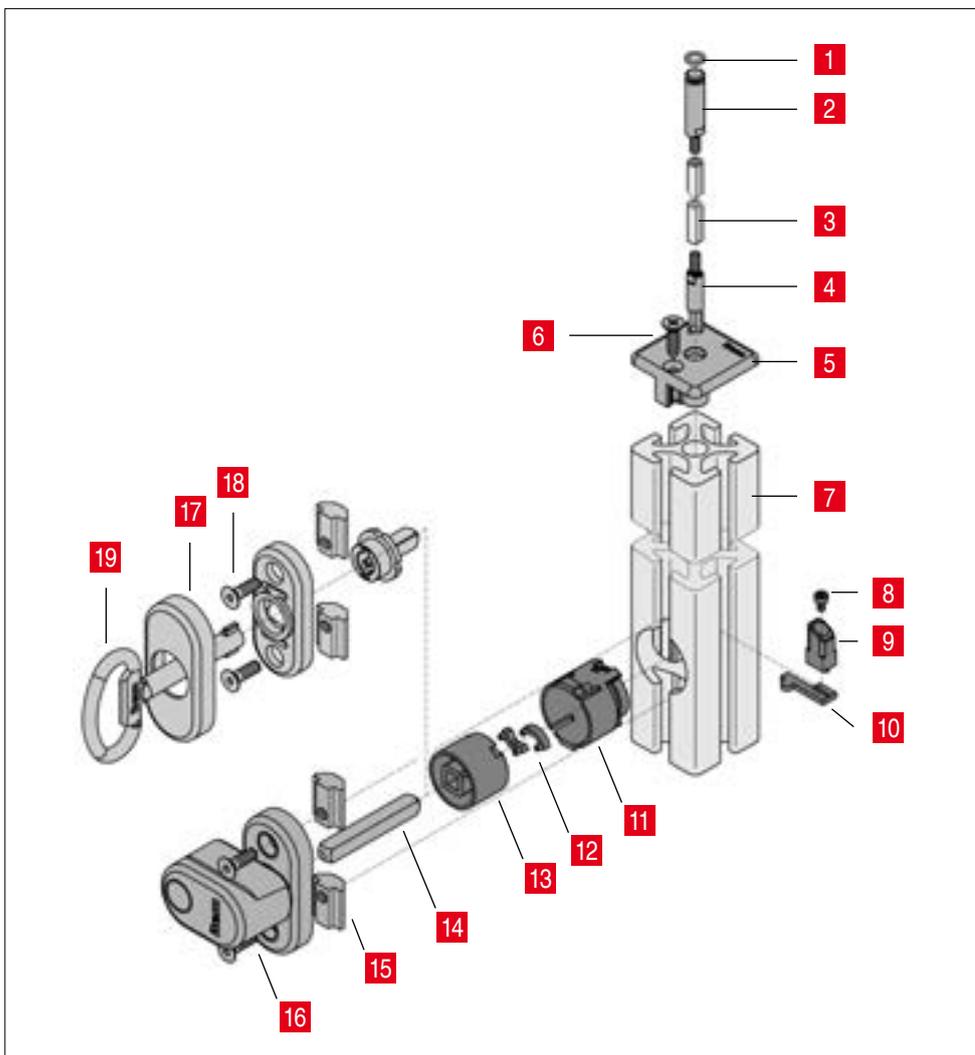


Integrated Lock System  
Installation Instructions

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## Integrated Lock System



- |                               |                                        |                             |
|-------------------------------|----------------------------------------|-----------------------------|
| <b>1</b> O-ring               | <b>8</b> Hex. Socket Head Cap Screw M3 | <b>14</b> Square drive      |
| <b>2</b> Locking Pin          | <b>9</b> Pawl                          | <b>15</b> T-slot nuts Al    |
| <b>3</b> Tube D6.3x1.6 5.5A/F | <b>10</b> Connecting plate             | <b>16</b> Door Knob         |
| <b>4</b> Rod actuator pin     | <b>11</b> Glide bush                   | <b>17</b> Cap               |
| <b>5</b> Cap (Rod Latch)      | <b>12</b> Alternating stops            | <b>18</b> Countersunk Screw |
| <b>6</b> Self-Tapping Screw   | <b>13</b> Crank                        | <b>19</b> Double-Beard Key  |

## General Notes

Integrated Lock System 8 is a modular Locking System for doors and flaps made with Line 8 Profiles. It is installed in the main Profile of the door frame („Door Profile“) and enables the door to be locked in up to three directions. Due to its modular design, the Lock System is suitable for locking doors whether they are left-hung or right-hung.

The base version of the Integrated Lock System consists of a Rotating Pawl Latch. It is attached to a suitable point on the Door Profile and operated via a Door Knob or Double-Beard Key. Turning it through 90° pivots the pawl out of the Profile Groove of the Door Profile and into the Groove of the door frame.



The Rotating Pawl Latch can be used in conjunction with up to two Rod Latches to provide improved locking security for the door. The push rods are concealed inside the core holes of the Door Profile and connected to the Locking Pins. Where two Rod Latches are used, it is feasible to do without the pawl altogether and just use the lock as a Rod Lock.



Since the bolts locate in the Profile Groove or core hole of the Door Profile and in the Door Profile corresponding groove of the door frame, the profile grooves of the door and frame must be aligned with each other. The Door Profile is ideally a Profile 8 or Profile 8 light; Profiles 8 E and Clamp Profiles are not suitable for mounting the Integrated Lock System because of their cross-sectional geometry.

The Lock System is completely concealed within the contour of the Door Profile and does not, as a result, form a striker plate. As a result, it is important to use the Door Stop 8 (Order No. 0.0.486.72) in addition.

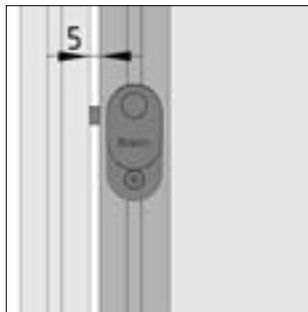
The Door Knob should be fitted in such a way that it is parallel with the Door Profile when the lock is engaged. The opening action should always be a movement away from the gap.

If the Double-Beard Insert of the lock is used, the direction of locking can be determined by the way in which the pawl and crank are assembled (see point 4a. of the assembly sequence).

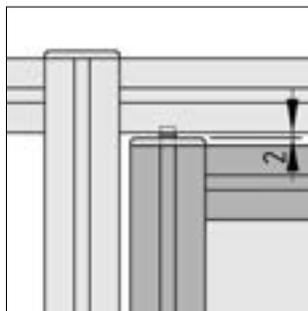


As a result of the limited length of the pawl and the short stroke of the Rod Latches, the following gap dimensions between the door and door frame on the side where the lock is should be adhered to:

Rotating Pawl Latch – gap between Door Profile and Door Frame, 5 mm.



Rod Latch – gap between Cap and Door Frame or Door Stop 8, max. 2 mm.



## Tools required

- Parallel shank counterbore  $\varnothing$  30 mm with a pilot (at least  $\varnothing$  11 mm)
- Drill  $\varnothing$  12 mm (for the Rod Latch option)
- Tap M4 (for the Rod Latch option)
- Allen key 2.5A/F; 3A/F
- Phillips screwdriver
- Open-jaw spanner 5A/F; 5.5A/F; 6A/F
- Liquid screw adhesive
- Grease

## Assembly sequence

### 1. Deciding on the door geometry

Decide on a position for the centre line of the Integrated Lock System at a suitable point on the Door Profile. If the lock is to be of the Rod Latch type, this position will determine the lengths of Tube D6.3x1.6 5.5A/F to be cut for the actuating rods (see Step 3 b).

### 2a. Drill clearance hole for lock unit

Straight clearance hole  $\varnothing$  30 mm, depth 25 mm. For this hole, use a suitable parallel shank counterbore with a pilot or, alternatively, the Step Drill for Universal Fastening Set 12 (Order no. 0.0.014.03).



### 2b. Drilling out the core hole (for the Rod Latch option)

Bore out the core hole of the Door Profile from the End Face of the Profile:  $\varnothing$  12 mm, depth 36 mm. Clean off all swarf and residues from the Profile.



### 3a. Preparing the door profile

Insert the T-Slot Nuts A1 into the outer Groove of the Door Profile in such a way that the thread is closest to the clearance hole. Insert the glide bush in the clearance hole. When doing so, ensure that the lugs locate in the Profile Groove and that the lateral opening in the glide bush points to the outer edge of the door. This opening is used later to swivel the pawl out of the lock.



### 3b. Guiding the Locking Pin (for the Rod Latch option)

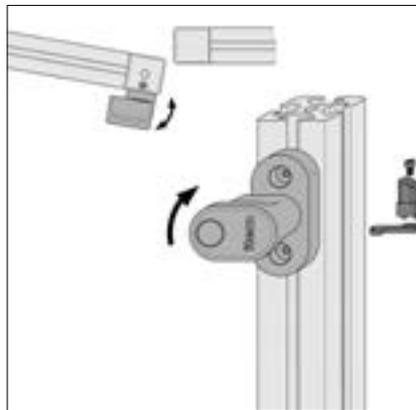
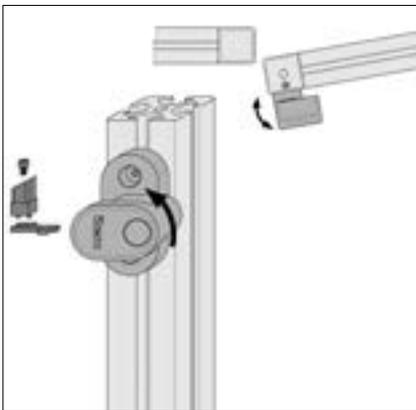
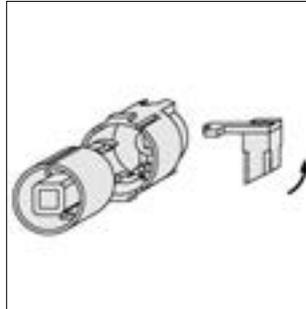
Position the Caps for the Rod Latches on the End Face of the Profile and screw them in place with a Self-Tapping Screw.



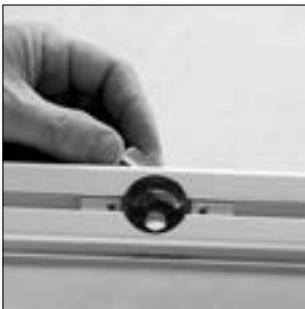
#### 4a. Fitting the Pawl

Screw the pawl and the connecting plate together. The plate converts the 90° rotation of the Door Knob or Double-Beard Key into the swivelling motion of the pawl. The direction of rotation is important:

the angled side of the pawl must face outwards and must locate in the groove of the door frame first when the knob is actuated. The connecting plate must be positioned in such a way that its carrier lug points out of the glide bush to the front.



Using a turning action, insert the preassembled pawl from the groove side through the opening into the glide bush.

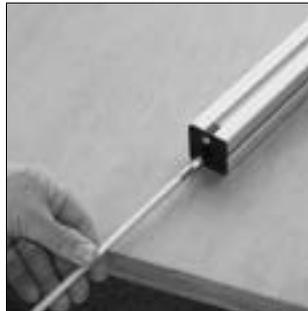
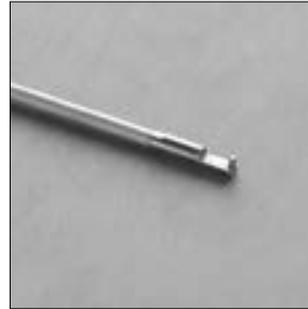
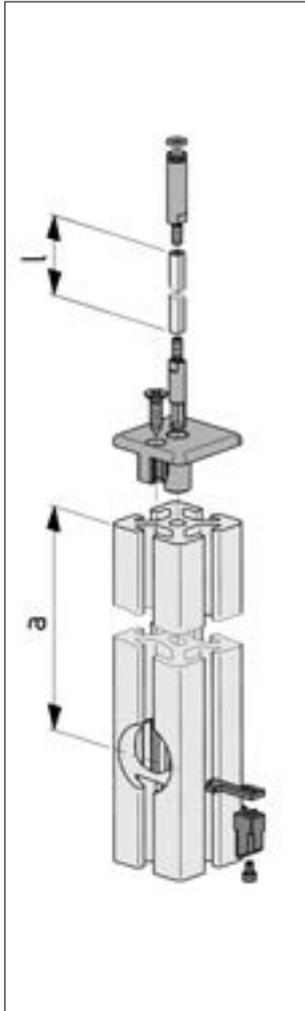


#### 4b. Attaching the Locking Rod (for the Rod Latch option)

Cut Tube 6.3x1.5 5.5A/F to the required length:

$$l = a - 60 \text{ mm}$$

Then tap the tube at both ends with an M4 thread and screw in the Rod Actuator Pin and Locking Pin. We recommend applying a suitable fluid screw adhesive. Apply an O-ring to the Locking Pin and press it into place in the circumferential groove. Insert the assembled Rod Latch (Rod Actuator Pin first) from the end face into the core hole of the Door Profile until the Rod Actuator Pin protrudes into the Glide Bush. Repeat this procedure on the other side.

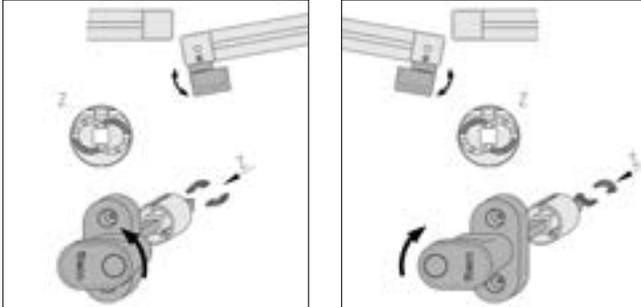


#### Note:

After this step, the screws used to attach Standard Fastenings for connecting the Frame sections of the door, will no longer be accessible with an Allen key. We recommend completing the door construction before inserting the Rod Latches and continuing with the assembly of the Lock System afterwards.

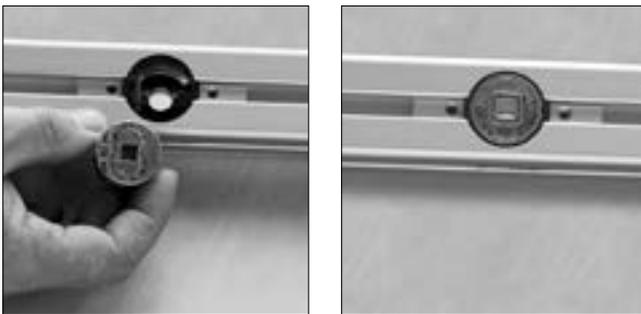
### 5. Preparation of the Crank (for the Rod Latch option)

Fit the alternating stops in place in the crank. The alternating stops close off those tracks in the cranks that are not required for the movement of the rod actuator pins. They also act as inner endstops for the lugs on the rod actuator pins and thus prevent locks without pawls from advancing too far. The tracks must be greased.



### 6. Inserting the crank in the glide bush

The curved tracks must face down into the bush. Ensure when doing so that all the carrier elements (lugs on the connecting plate and those on the rod actuator pins) locate in the corresponding recesses in the crank. After fitting, the crank will be flush with the outer edge of the glide bush.



### 7. Pre-assemble the Door Knob

Insert a suitable square drive in the hub. You will need the longer drive if you intend to fit Door Knobs from both sides of the door. To pass the square drive through the glide bush it is necessary to break out the centre section.



### 8. Fitting the actuator

Insert the Door Knob or Double-Beard Insert into the crank the correct way round and screw the baseplate in place in the T-Slot Nuts using countersunk screws.

Check the functions: all pawls must extend from the groove when the handle is operated. If there are problems, go back over the steps one at a time, taking particular care over points 4 to 6.



Where a second Door Knob is to be fitted, attach it on the other side of the door in the appropriate manner.

The locks on lockable Door Knobs locate in the baseplate on that side of the door only, in other words, if a door is locked from one side, it cannot be opened from the other.



#### Important note:

A Panel Element can be fitted to the inside Groove of the Door Profile. Take account of the reduced depth of the groove around the Integrated Lock System (5 mm). We recommend cutting out an appropriate part of the Panel Element to fit around the lock or ensure that only 5 mm of the Panel slide into the Groove.

### Development and documentation

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